

REMARKS

Claims 1-9 are pending.

Claims 1-9 stand rejected under 35 USC §103(a) as being allegedly unpatentable over Reid et al (US 2001/0015321) in view of Lowenheim text *Electroplating* and Barstad et al (US 2001/0047943).

Changes in the Claims:

Claims 1, 7, and 9 have been amended in this application to further particularly point out and distinctly claim subject matter regarded as the invention. The limitations of former dependent Claims 6 and 8 have been added to independent Claim 1. No new matter has been added.

Claims 6 and 8 have been canceled.

Rejection under 35 USC §103(a) – claims 1-9

Claims 1-9 stand rejected under 35 USC §103(a) as being allegedly unpatentable over Reid et al (US 2001/0015321) in view of Lowenheim text *Electroplating* and Barstad et al (US 2001/0047943). This rejection is respectfully traversed.

Under MPEP §706.02(j), in order to establish a prima facie case of obviousness required for a §103 rejection, three basic criteria must be met: (1) there must be some suggestion or motivation either in the references or knowledge generally available to modify the reference or combine reference teachings (MPEP §2143.01), (2) a reasonable expectation of success (MPEP §2143.02), and (3) the prior art must teach or suggest all the claim limitations (MPEP §2143.03). See *In re Royka*, 490 F. 2d 981, 180 USPQ 580 (CCPA 1974).

Applicant respectfully submits that the proposed combination of Reid, Lowenheim, and Barstad does not teach or suggest all of the claim limitations of claims 1-9. In particular, the combined teachings of Reid, Lowenheim, and Barstad fail to suggest “determining a concentration of an accelerator for the high-acid electroplating solution **based upon the chloride concentration and the leveler concentration.**”

Reid teaches that the concentration of the different components is based on the “effect at each of the four phases of the electroplating process” and **not** based on the relative concentration of other additives. Paragraph [0020] of Reid.

Lowenheim teaches that “the baths must contain minor amounts of chloride ion.” Page 202 of Lowenheim. Lowenheim does not teach or suggest as to “determining a concentration of an accelerator for the high-acid electroplating solution **based upon the chloride concentration and the leveler concentration.**”

Barstad teaches that the plating compositions also may contain other components such as one or more leveler agents and the like. Barstad is silent as to the concentration of one component with respect to others. As such, Barstad does not teach or suggest “determining a concentration of an accelerator for the high-acid electroplating solution **based upon the chloride concentration and the leveler concentration.**”

The office action asserts that “Reid teaches an accelerator can be included in the electroplating solution... It would have been obvious to optimize the concentration of accelerator in the plating solution of Reid in view of Lowenheim, because concentration is a result-effective variable.” Applicant respectfully disagrees.

“[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.” In re Aller, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

Reid teaches ranges of compositions. See Table 1 of Reid. Lowenheim teaches a range of concentration of Chloride ion. See Table 12-7 of Lowenheim. However, neither Reid nor Lowenheim suggest that the “concentration of an accelerator” be **based** on “the chloride concentration and the leveler concentration”. As such, the “general condition” of the claims is **not** disclosed in the prior art.

Applicant submits that neither Reid nor Lowenheim suggest “determining a concentration of an accelerator for the high-acid electroplating solution **based upon the chloride concentration and the leveler concentration.**” Thus, Applicant submits that claims 1-9 recite novel subject matter which distinguishes over any possible combination of Reid, Lowenheim, and Barstad.

Conclusion

For all of the above reasons, applicants submit that the amended claims are now in proper form, and that the amended claims all define patentable subject matter over the prior art. Therefore, Applicants submit that this application is now in condition for allowance.

Request for allowance

It is believed that this Amendment places the above-identified patent application into condition for allowance. Early favorable consideration of this Amendment is earnestly solicited.

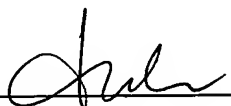
Invitation for a Telephone Interview

If, in the opinion of the Examiner, an interview would expedite the prosecution of this application, the Examiner is invited to call the undersigned attorney at the number indicated below.

Respectfully submitted,

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